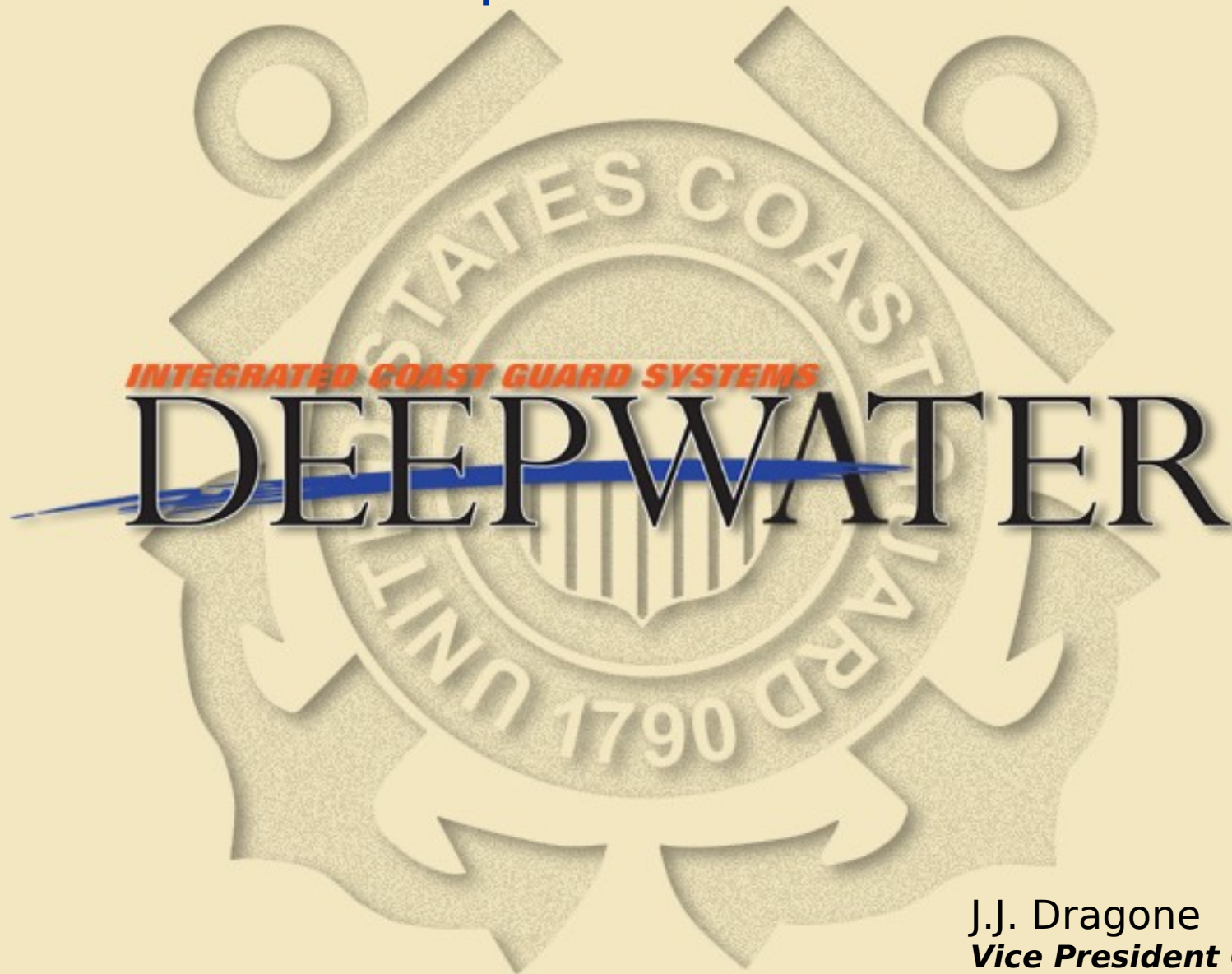


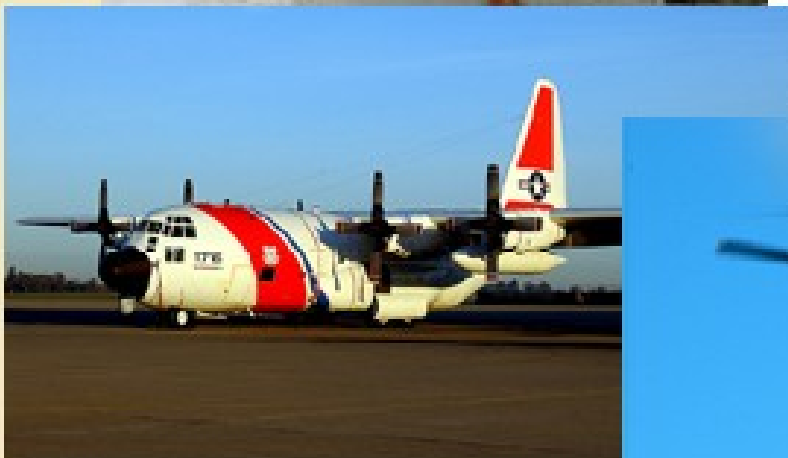
# Responding to the U.S. Coast Guard's Deepwater Needs



J.J. Dragone  
***Vice President Coast  
Guard & International  
Programs***

## *The Challenge*

- **Block Obsolescence of Major Assets**
- **Meeting Increasing Demand for Service**
- **Budget Realism**



# Developing an Integrated Response

- Understanding the U.S. Coast Guard's Capability, Missions, Requirements and People
- Analysis of Alternatives
- Systems Engineering the Solution
- Open Business Model™



INTEGRATED COAST GUARD SYSTEMS

**DEEPWATER**

Managing Change Through  
Partnership

***Innovation at all Levels***

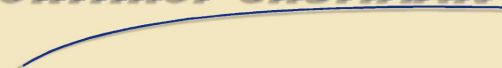
***INTEGRATED COAST GUARD SYSTEMS***

**DEEPWATER**

**LOCKHEED MARTIN**



***NORTHROP GRUMMAN***



**ARINC**

**EADS CASA**

**EADS Eurocopter**

**L3 Communications**

**LM Management & Data  
Systems**

**LM Technology Services**

**Northrop Grumman IT**

**PROSOFT**

***Bell Agusta Aerospace***

***Corporation***

***Bell Helicopter Textron***

***Halter - Bollinger***

***M. Rosenblatt & Sons***

***Northrop Grumman Full Service  
Center***

***United Defense, LP***

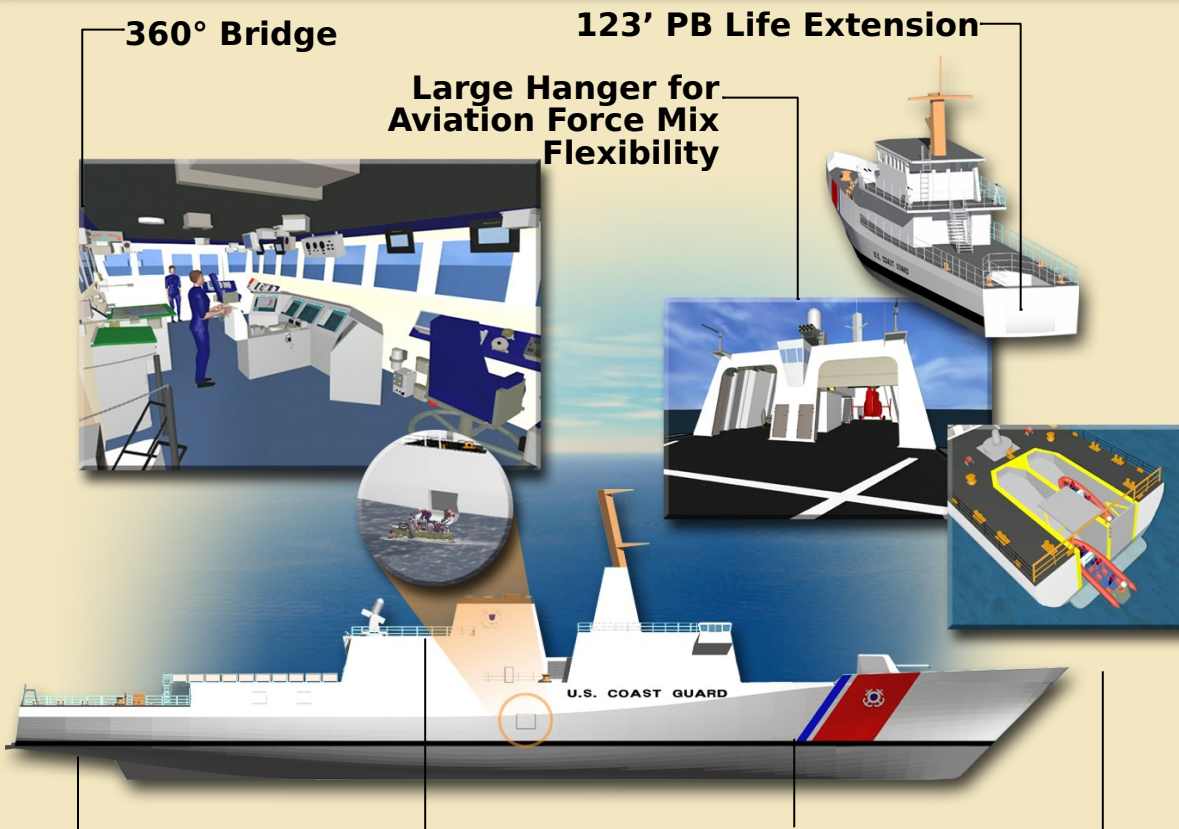
- 
- Legacy System Upgrades
  - System Wide C<sup>4</sup>ISR Architecture
  - New Surface and Air Assets
  - Integrated Logistics System



## The Surface Ships

### Capability Improvements

- New Cutters designed with mission and capability growth
- Provisions for interchangeable mission modules to enhance flexibility tailored to missions
- Stern ramps on all Cutters and upgraded 123 PBs enhance small boat launch and recovery Operations with less crew
- Dramatically improved habitability features include 2/4 person staterooms, fitness centers, lounges, and learning centers



123' Patrol Boats



Fast Response Cutters



National Security Cutters



Long Range Interceptors

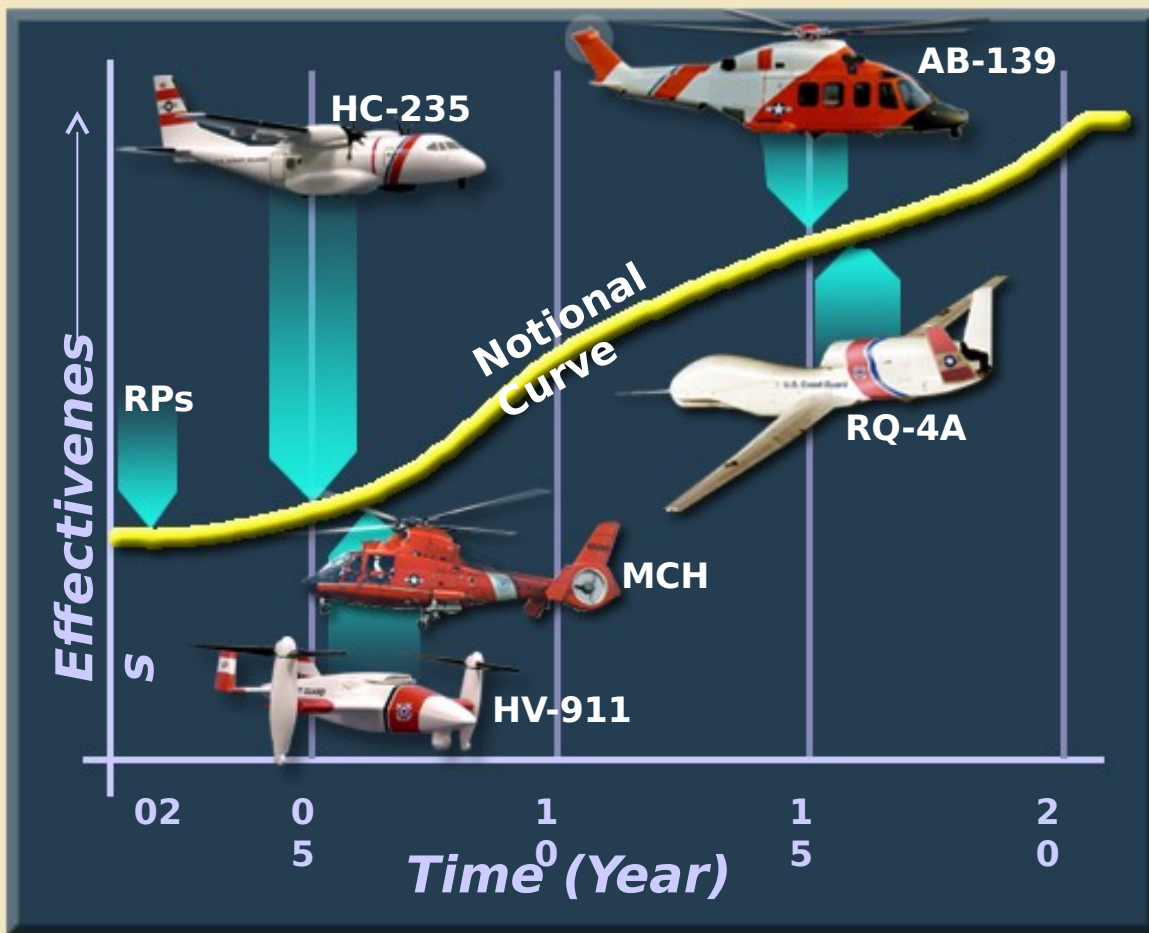


Offshore Patrol Cutters



Short Range Prosecutors

# The Aviation Assets



## Ability Improvements

- All aviation assets include night/all-weather capability with radar and EO/IR sensors
- Increased communications and common operating picture capability
- MPA and VUAV introduced in first five years support early retirement of high-cost-to-operate legacy aircraft



Long Range  
Surveillance



Maritime Patrol  
Aircraft



High Altitude  
Endurance



Multi-mission  
Cutter Helicopter



VTOL Recovery and  
Surveillance Aircraft



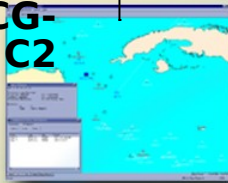
VTOL Unmanned  
Air Vehicle

# DEEPWATER

Managing Change Through  
Partnership

## The C<sup>4</sup>ISR Capability

Tactical Data  
from Each  
Asset  
Integrated  
into a  
Common  
Operating  
Picture via CG-  
C2



Exchange of  
Data Among  
Assets  
Ensured by  
24/7 SATCOM  
Data Links



Common C<sup>4</sup>ISR  
Architecture and  
Software Implementation  
Across All Assets  
Reduces Ops Costs and  
Accommodates  
Technology Refresh



Network Centric  
Architecture



Sensor Integration  
Achieved on Each Asset  
through Correlation of  
Specific Data and  
Fusion into the COP



COP Available  
on All Mobile  
and Shore  
Assets

**Early Increased Situational Awareness, Surveillance, and Command is  
Provided Through a Common Operating Picture to Answer Homeland  
Security Requirements**



## The Manpower and ILS Enhancements

Condition-Based  
Maintenance



Modernization and  
Technology Insertion

Asset Introduction  
Training



Personal Digital  
Assistant (PDA)  
Maintenance  
Support



Computer-  
Based Training



**Increased Automation and State-of-the-Art Technology,  
Decreased Manpower Requirements and Reduced Total  
Ownership Cost**

## System Solution Assets

Maritime Patrol Aircraft (MPA)



High Altitude Endurance  
UAV



HC-130



VTOL Unmanned Air  
Vehicle (UAV)



VTOL Recovery and  
Surveillance Aircraft



Multi-Mission Cutter  
Helicopter

National Security  
Cutter (NSC)



Offshore Patrol  
Cutter (OPC)



Fast Response  
Cutter (FRC)



Short Range  
Prosecutor



Long Range  
Interceptor



Modified 123'  
Patrol Boat





*The U.S. Coast Guard is  
Coordinated and Focused on the Real Threats*

- **Real-time Sharing of Data and Intelligence**
- **Interoperability with all Other Agencies and Governments**
- **Identification, Interception and control of High Risk Vessel Threats and Cargo Threats**

## *Other Dimensions of Deepwater*

- **Opportunity to leverage technologies and capabilities between U.S. Coast Guard, U.S. Navy and other agencies**
- **Unique opportunity for international cooperation**
- **Model for capabilities based procurement**



INTEGRATED COAST GUARD SYSTEMS

# DEEPWATER

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